Guideline Checklists for Fagan Inspection

1 Checklist for Inspection Moderators

Qualifications

1. Do you understand the purpose of inspections in general?
2. Do you understand why this particular inspection is being held?
3. Can you be objective on the subject of the inspection?
4. Have you ever participated in an inspection as reviewer or reviewee?
5. Do you have any personal difficulties with any of the reviewers that might interfere with your ability to lead the inspection?

Pre-inspection

1. Is the product ready for inspection?
2. Is all relevant material in your possession?
3. Have all relevant material being distributed on time?
4. Have all the reviewers received the material?
5. Have the reviewers confirmed their acceptance of the schedule?
6. Have the conference room be scheduled?
7. Have arrangements been made for the necessary equipment?

During the inspection

1. Are all participants well prepared?
2. Is there agreement on the objective of the inspection?
3. Are all the participants contributing?
4. Is the inspection well paced?
5. Is interest waning?
6. Have everyone been heard?
7. Has anyone tuned out?
8. Has someone (such as the producer) swayed people with emotional arguments or smooth presentations?
9. Is the agreement on the outcome of the presentation?
10. Is the agreement truly understood by all participants?

Bytech

Bytech

Post-inspection

1. Was the inspection successful?
2. Did it reach a workable conclusion?
3. Was anybody responsible, if the inspection was not successful?
4. Is the report prompt and accurate?
5. Are all participants satisfied with the outcome?
6. Did a product get a fair and adequate treatment?
7. Does the product group have a fair and reasonable basis for clearing up the issues?
8. Have all relevant people received the appropriate information?
9. Have the producers and participants profited from the inspection?
10. What can you do to make the next inspection better?
11. Has the required inspection data been gathered and recorded?
12. Have all identified problems been resolved or management informed?

2 Checklist for Recorders

Qualifications

1. Do you understand the purpose of inspection in general?
2. Do you understand why this particular inspection is being held?
3. Do you understand the jargon used and the formats used in this material?
4. Are you able to communicate with the type of people who will be in the inspection?
5. Can you be objective on the subject of the inspection?
6. Have you ever participated in an inspection as a reviewer or as a reviewee?

Pre-inspection

1. Can you identify, by name, the inspection leader and other participants?
2. Have you arrange your schedule to allow time for the inspection?
3. Have you allow time for the work you will have to do after the inspection?
4. Do you have the materials necessary for keeping an accurate record in the proper formats?
5. Do you have the resources available to carry out your job, during and after the inspection?

During the inspection

1. Do you understand what an issue is?
2. Are you recording all issues?
3. Are you recording things that aren't really issues?
4. Are your notes accurate reflections of the comments?
5. Are you making a flip chart or other visible record of the issues?
6. Do your detailed notes actually correspond to the flip chart abbreviations?
7. Do you have copies of any supplementary material introduced as a part of any issue?
8. How much of your report consists of editorial commentary?
9. Is the requirements stated explicitly or unambiguously?
10. Are the issues recorded in neutral language?

Post-inspection

1. Was the report promptly prepared?
2. Was it accurate?
3. Was the report properly reviewed and signed?
4. Was it distributed to all relevant people, including participants?
5. Was a complete copy of the inspected material and the report placed in the historical records?
6. If there were related issues raised, was a related issues report prepared?
7. Was all pertinent data on the inspection and its preparation gathered and provided to the moderator?

3 Requirements Inspection Checklist

1. All items needed to specify the solutions to the problem have been included?
2. Each item is free from error?
3. Each item is exact, there is a single interpretation, the meaning of each item is understood, and the specification is easy to read
4. No item conflict with other item in the specification.
5. Each item is pertinent to the problem and its solutions.
6. During program development and acceptance testing, it will be possible to determine whether the item has been satisfied
7. Each item can be traced to its origin in the problem environment?
8. Each item can be implemented with the available techniques, tools, resources, and personnel and within the specified cost and schedule constraints?

9. The requirements specifications are a statement of the requirements that must be satisfied by the problem solution, and they are not obscured by proposed solution to the problem
10. The requirements specifications are expressed n such a way that each item can be changed without excessive impact on other items.
11. Changes to the completed requirements specifications can be controlled, each proposed change can be traced to an existing requirement, and the impact of the proposed change can be assessed.

4 Design Misfit Checklist

Boundary oversights

1. Is everything going to fall between the cracks of "mine" versus "yours?"
2. Is anything going to be claimed by two or more parties?
3. Is each input, function, and output addressed by a specific, identifiable part of the system? Can you prove it?
4. Is there any misinterpretation of the person-machine interface -- either by a person or machine?

Over adaptation

1. Has any portion of this design received more emphasis than it seems to deserve? Can you explain why that happened and what affect it has had?
2. Is the design overly constrained, perhaps by paying too much attention to one part at the expense of others?
3. If you could relax any single constraint, which would it be? How would the design be affected?

Afterthoughts

1. Examine the last three things added to the design and answer the following questions for each:
2. What has been crammed in?
3. Could someone tell that the change was not part of the original conception- that is a patch to the design?
4. What wasn't considered when this change was made?
5. What would happen if this change were undone and left out of the final design?

Vestiges

1. What things are in the design because "we've always done it that way?" Why are you doing it that way?
2. Does the design reflect the machine on which it will operate? If so, why?
3. Is your design independent of the programming language that will be used? If not, why not?
4. Do you have a place to hold the buggy whip?

Mistakes

1. What have you forgotten?
2. What has been done wrong?
3. Did you dot the i's?
4. Did you ever go back and correct the problem you found when you were busy with something more important?
5. Do you have any notes on scraps of paper?

Insensitivity

1. Have you remembered the people who will have to use this system?
2. Have you remembered the people who will have to operate it?
3. Have you remembered the people who will have to repair it?
4. If you were one of these people, what one thing would you change in the design to make your life easier? Why wasn't the change made?

5 Questions to keep in mind when inspecting code

Function

1. Is there a concept, an underlying idea that can be expressed easily in plain language?
2. Is it expressed in plain language in the implemented code?
3. Does the function of this part have a clear place in the overall function of the whole, and is the function clearly expressed?
4. I the routine properly sheltered, so that it may perform its function reliably Inspite of possible misuses?

Form

1. Whatever style is adopted is it clean and clear when taken as a whole?
2. Is it meaningful to all classes of readers who see it?

3. Are there repeated code segments, whether within or between routines?
4. Are comments useful or are they simply alibis for poor coding?
5. Is the level of detail consistent?
6. Are standard practices used?
7. Is initialization properly done, and does the routine clean up after itself?

Economy

1. Are there redundant operations for which there is no compensation benefit?
2. Is storage use consistent, both internally and with external specifications?
3. How much will it cost to modify? (Consider the three most likely future modifications.)
4. Is it simple?

Checklist for Documentation Inspection

1). Have all phases of the document life cycle been considered?
   a. Is there provision for user feedback?
   b. Is there provision for making changes?
   c. Will changes in the system cause difficult or expensive changes in the documentation?
   d. Is the adequate provision for the distribution of changes to the documents?
   e. Can documents be reproduced easily?
   f. Can copying be prevented or controlled?
   g. Are there available people to supplement documents?
   h. Do the user and creators agree on the purpose of the documents?
   i. Is there adequate provision for keeping support people current and informed?
   j. Are tools available (e.g., fiche readers, terminals) for reading/accessing/storing these materials?
   k. Have the documents been properly approved?
   l. Do these documents show where they fall in the total plan?
   m. Do the documents indicate other documents that may be used as follow-up?

2) .Are the contents of the documents adequate?
   a. Coverage of topics
      i. All essential topics complete?
      ii. Have irrelevant topics been kept out?

        iii. Topics complete, but are there completeness in detail, assumptions, facts, and unknowns?
        iv. Is technical level appropriate to level of document?
        v. Who is the intended reader(s)?

  b. Correctness
        i. No errors of fact?
        ii. Are there no contradictions?

  c. Evidence
        i.   Is the evidence adequate to support the presentation?
        ii.   Is the evidence realistic?
        iii.   Is there a clear statement of goals of the documents?
        iv.   Are the goals consistent?
        v.   Does the presentation sounds authoritative?

3) .Are the materials in the documents clear?
  a. Are examples clear?
        i.   Used where necessary?
        ii.   Relevant where used?
        iii.   Contribute to understanding?
        iv.   Misleading?
        v.   Wrong?
        vi.   Less effective than their potential?

  b. Are diagrams, pictures, or other visual materials clear?
        i.   Used where necessary?
        ii.   Relevant where used?
        iii.   Contribute to understanding?
        iv.   Clearly rendered?
        v.   Misleading?
        vi.   Wrong?
        vii. Less effective than their potential?
        viii. Appropriate amount of information?

  c. Is terminology clear?
        i.   Consistent throughout all documents?
        ii.   Conforms to standards?
        iii.   Is there a glossary, if appropriate?
        iv.   Are definitions correct?
        v.   Are definitions clear?
        vi.   Is the glossary complete?
        vii. Is there too much technical terminology?

  d. Is writing style clear?

      i.   Do paragraphs express only connected ideas and no more?
      ii.   Are larger logical units broken into subheadings?
      iii.   Is the fog index too high for the audience?
      iv.   Does it talk down to the typical reader?
      v.   Does it put you to sleep?
      vi.   Is there an abstract?

4) .Are the documents adequately supplied with reference aids?

    a. Is there a table of contents, if appropriate?
    b. Is the table of contents well placed?
    c. Is the table of contents correct?
    d. Is there an index, if appropriate?
    e. Is the index well placed?
    f. Is the index correct?
      i.   Are page references accurate?
      ii.   Are there entries for the kinds of things the various classes of users will
           Be seeking?
      iii.   Are the entries under the right title?
      iv.   Is there alternate title for entries that might be accessed using different terminology?
      v.   Are major and minor entries for the same terms distinguished?

vi.   Are terms broken down adequately, or are there too many page references under single terms, indicating that more subcategories are needed?
      vii. Are there superfluous entries?

    g. Is there a bibliography of prerequisite publications?
      i.   Is there are no prerequisites, is this stated?
      ii.   Is the bibliography where it will be found before attempting to read the document?
      iii.   Are the references complete enough to locate the publication?
      iv.   Are there annotations to help the reader choose the appropriate document?

    h. Is there a bibliography of related publications that may contain further information?
      i. If this is a unique source of information, is this stated?
      ii. Are the references complete enough to locate the publications?
      iii. Are there annotations to help the reader choose the appropriate document?

i. Does the organization of the documents themselves contribute to the ease of finding information?
    i.   Is page numbering sensible?
    ii. Is page numbering complete?